

1922 **CIRCUITRY (Superregeneration)****E H Armstrong (USA)**

Superregeneration was discovered by E H Armstrong during the defense of his patent case for the regenerative receiver. In a superregenerative receiver, sustained oscillations are squelched by periodic variation of the effective resistance of the input resonant circuit. Oscillations periodically build up in a circuit resonant at the signal frequency. Sustained oscillations are prevented by periodic application to the grid of the superregenerative tube of a signal that damps the oscillations. The quenching frequency is usually between 20 000 and 100 000 cps. The superregenerative detector, because of its broad tuning and considerable sensitivity, was practical and popular earlier when unstable modulated oscillators were used as transmitters at frequencies above 30 Mc.

SOURCE: 'Radio receivers—past and present' by C Buff *Proc. IRE* p 887 (May 1962)

SEE ALSO: 'Super-regenerative receivers' by J R Whitehead (Cambridge: Cambridge University Press) (1950)